

Inaugural Lecture

In search of eco-friendly composite materials: opportunities and challenges





ABSTRACT

This presentation details my research contribution to biocomposite materials. Physical, thermal and mechanical properties of all the constituents of biocomposite, namely, matrix, micro/nano fillers, fibers and fiber/filler-matrix adhesion were enhanced by our novel physical and chemical surface modification methods. The structure-property relationships are evaluated in detail. Processing of these materials in the form of fibers, films, sheets and panels for various applications is presented. The opportunities and challenges of these materials in engineering applications and green economy is discussed.





